

CLAIMS

1. A cover connectable to an electrical component to assist a tool in assembling the electrical component to another structure, the cover comprising:

 a body section having a top surface configured to form a vacuum seal with a tool;
 and

 a component retention member connected to an end of said body section for releasably securing said body section to an electrical component.

2. The cover of claim 1, wherein said component retention member includes a release arm normally biased toward an electrical component and deflectable in an opposite second direction away from an electrical component.

3. The cover of claim 1, wherein said component retention member includes a catch surface configured to be secured to a bottom of an electric component to retain said body section on an electric component.

4. The cover of claim 1, wherein said component retention member includes a release arm oriented at a retention angle to, and extending downward from, said top surface, said release arm being deflectable from said retention angle to release an electrical component.

5. The cover of claim 1, wherein said component release member includes a release arm formed with and bent downward from said body section, said release arm having a lower ledge bent inward to hold an electrical component when said release arm is in a normally biased position.

being normally biased to form an angle with respect to said top surface, said angle being no greater than ninety degrees, said release arm being deflectable to form an obtuse angle with respect to said body section to release an electrical component

7. The cover of claim 1, further comprising a stop beam extending from an end of said body section at an acute angle to said top surface, said stop beam being configured to engage an electrical component to hold an electrical component a desired distance from said body section.

8. The cover of claim 1, wherein said body section is injection molded with opposite ends molded integral with end walls of said component retention member, said end walls extending in a direction transverse to a plane containing said top surface, said end walls extending laterally along said opposite ends.

9. The cover of claim 1, wherein said component retention member includes a release beam oriented parallel to a plane containing said body section, said release beam extending laterally along an end of said body section.

10. The cover of claim 1, wherein said component retention member is formed integral with an end of said body section.

11. The cover of claim 1, wherein said top surface is rigid and planar to facilitate the formation of a vacuum seal.

12. An electrical component cover, comprising:

a body section having peripheral edges and a planar top surface configured to form a vacuum seal with a tool for automatically assembling electrical components to other structures;

an end flange provided along a peripheral edge of said body section, said end flange being configured to prevent movement of an upper end of an electrical component in at least one direction parallel to said top surface; and

RELEASE ARM CONNECTED TO AN EASICLESS RELEASE MEMBER ON ONE OF THE OPPOSITE EDGES OF SAID BODY SECTION, SAID RELEASE ARM BEING CONFIGURED TO RELEASEABLY RETAIN AN ELECTRICAL COMPONENT.

13. The cover of claim 12, wherein said release arm is normally biased toward an electrical component and deflectable in an opposite second direction away from an electrical component.

14. The cover of claim 12, wherein said release arm includes a catch surface configured to be secured to a bottom of an electric component to retain said body section on an electric component.

15. The cover of claim 12, wherein said release arm is oriented at a retention angle to, and extending downward from, said planar top surface, said release arm having a lever extending upward from said planar top surface, said release arm being deflectable from said retention angle to release an electric component.

16. The cover of claim 12, wherein said release arm is formed with and bent downward from said body section, said release arm having a lower ledge bent inward to hold an electric component when said release arm is in normally biased position.

17. The cover of claim 12, wherein said release arm extends in a direction generally perpendicular to said body section and is normally biased to form an angle with said planar top surface that is no more than ninety degrees, said release arm being deflectable to form an obtuse angle with respect to said body section to release an electric component.

18. The cover of claim 12, further comprising a stop beam extending from an end of said body section at an acute angle to said planar top surface, said stop beam being configured to engage an electric component to hold an electric component a desired distance from said body section.

19. The cover of claim 12, wherein said body section is injection molded with opposite ends molded integral with the walls of said release arm, said end walls extending in a direction transverse to a plane containing said planar top surface, said end walls extending laterally along said opposite ends.

20. The cover of claim 12, wherein said release arm includes a release beam oriented parallel to a plane containing said body section, said release beam extending laterally along an end of said body section.

21. The cover of claim 12, wherein said planar top surface is rigid to facilitate the formation of a vacuum seal.

22. An electrical component cover, comprising:

a body section having peripheral edges and a planar top surface configured to form a vacuum seal with a tool for automatically assembling electrical components to other structures;

a release arm connected to at least one of said at least two opposed edges of said body section, said release arm being configured to releasably retain an electrical component.

23. The cover of claim 22, wherein said release arm is normally biased toward an electrical component and deflectable in an opposite second direction away from an electrical component.

24. The cover of claim 22, wherein said release arm includes a catch surface configured to be secured to a bottom of an electric component to retain said body section on an electric component.

25. The cover of claim 22, wherein said release arm is oriented at a retention angle to and extending downward from said planar top surface, said release arm having a lever extending upward from said planar top surface, said release arm being deflectable from said retention angle to release an electric component.

26. The cover of claim 22, wherein said release arm is oriented at a retention angle to and extending downward from said planar top surface, said release arm having a lower ledge bent inward to hold an electric component when said release arm is in normally biased position.

27. The cover of claim 22, wherein said release arm extends in a direction generally perpendicular to said body section and is normally biased to form an angle with said planar top surface that is no more than ninety degrees, said release arm being deflectable to form an obtuse angle with respect to said body section to release an electric component.

28. The cover of claim 22, further comprising a stop beam extending from an end of said body section at an acute angle to said planar top surface, said stop beam being configured to engage an electric component to hold an electric component a desired distance from said body section.

29. The cover of claim 22, wherein said body section is injection molded with opposite ends molded integral with end walls of said release arm, said end walls extending in a direction transverse to a plane containing said planar top surface, said end walls extending laterally along said opposite ends.

30. The cover of claim 22, wherein said release arm includes a release beam oriented parallel to a plane containing said body section, said release beam extending laterally along an end of said body section.

31. The cover of claim 22, wherein said planar top surface is rigid to facilitate the formation of a vacuum seal.